## REMARKS

After Applicants filed an Appeal Brief, prosecution was re-opened and new rejections were issued. Reconsideration and allowance are respectfully requested.

Several claims now stand objected to for dependency issues and rejected for antecedent basis issues. Those issues have been overcome in this amendment. Specifically, the claim numbering used before appeal has been retained, and antecedent basis provided. Withdrawal of the objections and rejection is requested.

In a new prior art rejection, claims 1, 2, 4, 9, 27, 31, and 38 stand rejected for obviousness under 35 U.S.C. §103 based on Yuen and Balachandran. This rejection is respectfully traversed.

Yuen describes a handoff procedure in which the mobile monitors the signal quality of a downlink transmission from a first serving base station and from other candidate base stations. If the downlink signal quality from any of the other candidate base stations exceeds one or more criteria, the mobile initiates a handover. There is nothing in Yuen that describes whether the first base station determines the condition of the uplink channel from the mobile to the base station to determine whether the uplink channel condition is sufficient for the base station to accurately receive a feedback signal (including one of an ACK, NAK, or lost signal) from the mobile.

The Examiner assumes the mobile is the first node, the first channel is the uplink channel to the second node base station, and the second channel is the downlink channel from the mobile to the base. But there is no teaching in Yuen of the mobile determining the condition of the downlink channel and delaying further transmission of data packets over the uplink channel to that base station until the quality of the downlink channel exceeds a threshold.

The Examiner's attempt to force fit the claim language into Yuen's handover situation is not reasonable. Claim 1 recites that "data packets are communicated from the first node (here the mobile) over a first channel (here the uplink) to a second node (here the serving base station)." Data packets are being and have already been transmitted from the mobile to the base station. In Yuen's handover scenario relied on by the Examiner, data packets have not yet been sent to the target base station. So there is no scheduling of *further* transmission of data packets to the target base station. Nor is there any delay of *further* transmission of data packets to the target base station since data packets have not yet been transmitted.

And as the Examiner admits, Yuen also does not teach the claimed feedback signal or feedback signaling on the specific channels recited. In this latter regard, the Examiner relies on Balachandran. Balachandran describes link adaptation in EGPRS, choosing an MCS based on the channel condition. Retransmissions are more robustly encoded than the first transmission attempt in the hope of reducing overall message delay time. But the transmission channel and the channel condition both relate to the same direction channel. Like Yuen, Balachandran fails to appreciate the advantages of taking the opposing direction (e.g., uplink) channel quality in account when scheduling data for the initial data transmission direction (e.g., downlink). The inventors realized that it made more sense to delay data transmission in the initial direction (e.g., downlink) until the opposing direction (e.g., uplink) channel condition improved, so that the probability of receiving an accurate feedback signal was more favorable.

So even if the combination of Yuen and Balachandran could have been made, for purposes of argument only, that combination fails to disclose the following features recited in independent claim 1:

- "the first node determining a condition of the *second* channel,"

- "the *first node* determining whether the condition of the *second* channel is sufficient for the first node to *accurately continue receiving a feedback signal from the second node*, and
- "based on the determined condition of the second channel, *the first node scheduling further transmission of data packets over the first channel including delaying further transmission of data packets over the first channel until the quality of the second channel exceeds a predetermined threshold.*"

Similar type claim features are recited in the other independent claims including claim 26.

Claims 3, 10-12, 14-18, 21, 22, 28, 34,-36, 39-43, 46, and 47 stand rejected for obviousness based on Yuen in view of Balachandran and further in view of Labonte. The rejection is respectfully traversed.

Labonte describes a method for selecting between different modulation levels for transmitting packet data in a cellular system. More particularly, Labonte relates to a D-AMPS+ system which includes a low-level modulation packet control channel, a high-level modulation packet control channel, a low-level modulation packet traffic channel, and a high-level modulation packet traffic channel. Labonte provides a method for selecting and transitioning between the low-level and high-level modulation packet control/traffic channels. The Examiner relies specifically on column 7, which describes the mobile station optionally receiving from the base station a signal quality measurement of the uplink channel. The mobile decides "whether the signal quality uplink and downlink is sufficient for packet data communications." There is no intentional delay in transmitting packets over a downlink channel. Rather, Labonte elects to transmit using low-level modulation when a channel condition is poor.

As previously admitted by the Examiner, Labonte fails to disclose delaying transmission of data packets over the first channel until the quality of the second channel exceeds a predetermined threshold. So even with this third reference, the combination of features recited in the independent is still missing.

The Examiner also uses improper hindsight to combine Labonte, Yuen, and Balachandran. Labonte's solution to poor channel quality is to use low-level modulation—not to delay transmission. Labonte is not concerned with scheduling when to transmit data packets to ensure that ARQ feedback signals are received reliably. Neither Yuen nor Balachadran teach scheduling further packet transmissions in one direction in an already-established connection based on the condition of the channel in the opposite direction.

A proper motivation to combine requires an appreciate of the desirability of making the combination. It is not measured by the feasibility of making the combination. See *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed. Cir. 2000). The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and no knowledge of the claimed invention, would select the elements from the cited prior art references for the combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). The Examiner fails to make such a showing in this case. The obviousness rejection is improper on this ground as well.

The remaining claims are rejected for obviousness based on the teachings of four references: Yuen, Balachandran, Labonte, and Garceran. Garceran discloses a method to determine wireless coverage using geographic location coordinate information received from a mobile unit. Particularly, the Examiner relies on the text in column 3, which describes the radio

network using various information including uplink and downlink signal quality measurements to the RF coverage for a particular geographical location. Lines 12-25 state:

> The RF coverage system obtains location information for the wireless unit, which includes position, such as latitude/longitude, and can include time, speed, distance and/or direction. While a wireless unit is communicating with a base station, the RF coverage system can dynamically determine RF coverage using the location information from the wireless unit in association with additional information and/or measurements, such as signal quality measurements which can include received signal strength (RSSI), bit error rate (BER) and/or frame error rate (FER), made at the wireless unit and/or at the receiving base station(s), and/or other information or parameters, such as operating conditions, mobile identity, traffic load, frequency, speed, direction, time and/or mobile type.

Garceran further explains that the serving base station can periodically receive "associated information from the wireless unit 54" including signal quality measurements of the base station's transmit signal and that the base station 56 can perform signal quality measurements of the received signal from the wireless unit 54.

The Examiner has already admitted that Garceran does not disclose "employing the ARQ protocol by the base station to provide reliable communications with the wireless user, where the ARQ feedback is an acknowledge, negative acknowledge or lost signal determined to be sufficient when the probability of reception error is below an error threshold." The Examiner further admits that "Garceran also does not explicitly show delaying data transmission over the downlink until the uplink signal quality is sufficient or [sic] for a preset period of time." So Garceran is also missing features that the other three references are missing. And like the addition of Labonte, the addition of a fourth possible reference to the combination stretches both the desirability and feasibility of making the many modifications that the Examiner now proposes for Yuen.

The application is in condition for allowance. An early notice of same is requested.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: _____
John R. Lastova
Reg. No. 33,149

JRL:sd
Nixon & Vanderhye PC
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100